COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
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COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Southwest Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

General Dynamics-Armament and Technical Products, Inc.
325 Brunswick Lane - Marion, Smyth County, Virginia
Permit No. SWRO10050

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, General Dynamics – Armament and Technical Products, Inc. has applied for the renewal of a Title V Operating Permit for its Marion – Plant 1 facility. The Department has reviewed the application and has prepared a Title V Operating Permit.

Permit Contact:_____ Date:_____
E. Cliff Musick
(276) 676-4833

Air Permit Manager:_____ Date:_____
Rob Feagins

Regional Director:_____ Date:_____
Allen J. Newman, P.E.

FACILITY INFORMATION

Permittee
General Dynamics-Armament and Technical Products, Inc.
150 Johnston Road
Marion, VA 24354

Facility
General Dynamics-Armament and Technical Products, Inc., Marion Operations, Plant 1
325 Brunswick Lane
Marion, VA 24354

County-Plant Identification Number: 51-173-00001

SOURCE DESCRIPTION

NAICS Code: 332311 – Fabricated metal buildings
336412 – Aircraft engines and engine parts
336413 – Aircraft parts and auxiliary equipment NEC
336419 – Guided missile and space vehicle parts

General Dynamics-Armament and Technical Products, Inc. has an aerospace and metal shelter product manufacturing operation that includes the fabrication and assembly of a variety of military and commercial items. The operations include the application of many coatings, resins, adhesives, fillers, or cleaners by several different methods, such as spray coating, brushing, chemical conversion, troweling, rolling, etc. Most of the operations are labor intensive, and involve many fabrication/assembly steps.

The facility is a Title V major source of hazardous air pollutants (HAPs). This source is located in an attainment area for all pollutants. The facility is currently permitted under a Minor NSR Permit issued on April 30, 2008 (as amended 09/24/2012 and 03/12/13).

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment							
18	18	Cleaver Brooks Model D-68 gas/oil boiler – 1200 hp – 1972	50.2 MMBtu/hr	-	-	-	04/30/08 (as amended 09/24/12 & 03/12/13)
19	19	Cleaver Brooks Model CB-200-300 gas/oil boiler – 300 hp – 1985	12.5 MMBtu/hr	-	-	-	04/30/08 (as amended 09/24/12 & 03/12/13)
Emergency Engines							
114	114	Kohler emergency generator, GM Engine 52729 - 2009	42 kW	-	-	-	-
Heat Cleaning							
5	5	Bayco Model BB-56 Heat Cleaning Oven (gas fired)	116.4 lbs charged/hr	afterburner	-	PM, VOC	04/30/08 (as amended 09/24/12 & 03/12/13)
Shelter Coating Operations							
6, 7, 9, 11, 12, 13, 14, 21, 22, 23, 33, 80	same	Shelter Primer/Coating mixing, spray booths, and drying operations	4,000 – 6,000 lb product/hr	Booths are equipped with filters	-	PM/PM10	04/30/08 (as amended 09/24/12 & 03/12/13)
Aerospace Coating Operations							
63, 65, 69a&b	same	Aerospace composite spray booths	4,000 lb product/hr	Booths are equipped with 2-stage filters	-	PM/PM10	04/30/08 (as amended 09/24/12 & 03/12/13)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Resin Impregnation/Prepreg Operations							
40, 41, 81	same	Impregnation of fiberglass or other materials with various resins	200 lb product/hr each (#49-100 lb/hr)	----	----	----	04/30/08 (as amended 09/24/12 & 03/12/13)
Resin Transfer Molding							
96a&b, 97 98 110	same	96a&b and 97 – Tackifier Spray Booths Fume Hood Sanding/Trim Booth	2 T product/hr each -- 2 T/hr	Fiberglass filters (1-stage) -- Fiberglass filters	-	PM/PM10	04/30/08 (as amended 09/24/12 & 03/12/13)
Grinding/Sanding/Routing							
20, 46, 57, 58, 61, 66, 67, FWG1-11, 80, 95, 107	same	Trimming panels, sanding and grinding of ceramic or quartz radomes	Panel trim – 600 lb product/hr sanding – 4,000 lb product/hr grinding – 200 lb product/hr	Various baghouses Including Ref#107	-	PM/PM10	04/30/08 (as amended 09/24/12 & 03/12/13)
Metal Cleaning							
1-4	same	Aluminum wash, rinse, acid wash tanks	6,000 lb product/hr	Venturi scrubbers for acid tanks	-	PM/PM10	04/30/08 (as amended 09/24/12 & 03/12/13)
Flame/Arc Spray Booth							
27	same	Flame spraying; Arc spraying	600 lb product/hr; 4000 lb/hr	Filters	-	PM/PM10	04/30/08 (as amended 09/24/12)

EMISSIONS INVENTORY

A copy of the 2011 annual emission update or permit application emission inventory is attached. Emissions are summarized in the following tables.

2011 Actual Emissions

	2011 Criteria Pollutant Emission in Tons/Year				
Emission Unit	VOC	CO	SO_2	PM_{10}	NO_x
Total	38.03	2.55	0.02	1.54	3.03

2011 Facility Hazardous Air Pollutant Emissions

Pollutant	2011 Hazardous Air Pollutant Emission in Tons/Year
Total HAPs	4.2

The company provided potential greenhouse gas emissions estimates showing that they could emit up to 45,000 tons of CO2e, which is well below major source thresholds.

EMISSION UNIT APPLICABLE REQUIREMENTS - #18 & #19 Cleaver Brooks boilers

Limitations

The following limitations are State BACT requirements from Conditions 10, 11, 12, 13, 14, 21, 25, 26, 30, and 32 of the Minor NSR Permit issued on April 30, 2008 (as amended 09/24/2012 & 03/12/13):

Condition 10 requires that the facility provide for testing ports as necessary.

Condition 11 limits the approved fuels to natural gas and distillate oil.

Condition 12 specifies that the sulfur content of the oil cannot exceed 0.5% by weight per shipment.

Condition 13 limits natural gas consumption to 90 million cubic feet per year.

Condition 14 limits distillate oil consumption to 105,000 gallons per year.

Condition 21 limits emissions from the boilers to:

Sulfur Dioxide	32.3 lbs/hr	3.8 tons/yr
Nitrogen Oxides (NOx)	9.1 lbs/hr	5.5 tons/yr
Carbon Monoxide	5.1 lbs/hr	4.0 tons/yr

Condition 25 limits visible emissions from the boilers to 20% opacity, except for one 6-minute period not to exceed 30% opacity.

Condition 26 requires recordkeeping of monthly and annual fuel consumption.

Condition 30 requires maintenance schedules, spare parts inventory, written operating procedures, and operator training records for control and process equipment affecting emissions.

Condition 32 requires that notification be provided for malfunctions of processing or control equipment that may cause excess emissions for more than one hour.

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5-50-10 – 50 contain general requirements for proper operation, maintenance, recordkeeping, notification, and compliance.

9 VAC 5-50-80 Standard for Visible Emissions
The units are subject to an opacity limit of 20%, except for one six-minute period in any one hour not to exceed 30%.

The units are subject to emission standards outlined in 9 VAC 5-40, Article 8 in the absence of any standards from Chapter 50 of State Regulations.

9 VAC 5-40-900, Standard for Particulate Matter (PM)

Since one boiler (#18) was installed prior to 1979, by definition, it is considered a fuel burning equipment installation. The other boiler (#19) was installed after 1979, and will be examined as a unit. In the absence of a permit limitation on particulate matter emissions from the units, a standard must be determined from this section. According to 9 VAC 5-40-900 A.1.b, the installation may not emit more particulate matter than can be calculated by the formula:

$$E = 1.0906\ H^{-0.2594}$$

where E is particulate emissions in lb/MMBtu and H is the heat rating of the units. The resulting particulate matter emission standards are,

$$E_{18} = 1.0906(50.2)^{-0.2594}\ \text{lb/MMBtu} = 0.39\ \text{lb/MMBtu}$$
$$E_{19} = 1.0906(12.5)^{-0.2594}\ \text{lb/MMBtu} = 0.57\ \text{lb/MMBtu}$$

9 VAC 5-40-930, Standard for Sulfur Dioxide
Sulfur dioxide emissions are limited according to the formula

$S = 2.64\ K$ where, S is lb/hr of SO_2, and
K is the heat capacity of the unit (MMBtu/hr).

$S_{18} = (2.64)(50.2) = 132.5$ lb/hr SO_2
$S_{19} = (2.64)(12.5) = 33.0$ lb/hr SO_2

These limits are higher than the established emission limits in the minor NSR permit.

The following federal regulations that have specific emission requirements have been determined to be applicable:

40 CFR 63.7480-7575, Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, applies to both units. The company submitted initial notification to comply with the final rule issued in 2004. The rule was vacated by federal court and was reissued on February 21, 2011. The rule was reconsidered thereafter, and a final rule was signed by EPA on December 21, 2012. The compliance date will be three years following publication in the Federal Register (compliance date is January 31, 2016). Until such time, there are no applicable requirements with which to comply.

Monitoring

The hourly emission limits from distillate oil and natural gas combustion were established based on the maximum rated capacity of the units, insuring that the likelihood of exceedance is very small as long as the unit is maintained and operated properly while processing the approved fuels. Annual emission limits were established based on the annual fuel throughput limits. Compliance with these emission limits is expected as long as the fuel throughput limits are not exceeded.

The emission factors used to develop the permitted emission limits are shown below. These factors were typical at the time the permit was written, and represent average emissions from such units. Proper operation and maintenance will insure that the emission limits are met.

Distillate Oil Combustion

Emission factors from SCC 1-02-005-02
PM 2 lb/1000 gal
SO_2 142 S lb/1000 gal (S= wt% sulfur)
CO 5 lb/1000 gal
NO_x 20 lb/1000 gal

Natural Gas Combustion

Emission factors from SCC 1-02-006-02
PM 7.6 lb/10^6 ft^3
SO_2 0.6 lb/10^6 ft^3
CO 84 lb/10^6 ft^3
NO_x 100 lb/10^6 ft^3

Compliance with the particulate matter standard may be demonstrated using the above emission factors and the maximum heat content of the fuels as follows:

(1 gal/140,000 Btu)(2 lb/1000 gal)(10^6 Btu/MMBtu) = 0.014 lb/MMBtu
(1 ft^3/1000 Btu)(3 lb/10^6 ft^3)(10^6 Btu/MMBtu) = 0.003 lb/MMBtu

Based on these factors, whether combusting natural gas or distillate oil, compliance with the particulate matter standards is expected. No further monitoring or compliance determinations are required.

The NSR permit limits were established for the boilers based on the maximum capacity of each unit. The SO_2 emission limit was established using the permit limitation of 0.5 wt% sulfur content of the oil. As long as this limit is complied with via fuel analysis results and recordkeeping, the emission limit will be met. Therefore, these emission limits will not be exceeded, provided the units are well maintained and operated at or below maximum capacity.

Since the units operate by combustion of pipeline quality natural gas and distillate oil, no additional monitoring is required to show compliance with the opacity limit of 20%.

The boilers employ no controls for regulated air pollutants. Therefore, compliance assurance monitoring (CAM) requirements do not apply.

Recordkeeping

The Title V permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include monthly and annual fuel consumption, fuel analyses of distillate oil shipments, hours of operation, written operating procedures, operator training, and maintenance schedules.

Testing

The Title V permit does not require source tests for these units. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

The company is required to provide notification for malfunctions of processing or control equipment that may cause excess emissions for more than one hour. An annual compliance certification is required of all Title V permit holders.

Streamlined Requirements

The requirements of 9 VAC 5-40-930, Standard for Sulfur Dioxide, are less stringent than the emission limits included in the NSR permit. Therefore, streamlining is appropriate. The Title V permit will contain the minor NSR permit limits related to the use of approved low sulfur fuels. 9 VAC 5-40-930 will be cited in the Title V permit as indication that the associated standard was streamlined.

EMISSION UNIT APPLICABLE REQUIREMENTS - #114 – Emergency Engine

The company identified Ref. #90 (diesel fire pump engine) as being permanently removed from the facility.

Limitations

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5-50-10 – 50 contain general requirements for proper operation, maintenance, recordkeeping, notification, and compliance.

9 VAC 5-50-80 - Standard for Visible Emissions
The unit is subject to an opacity limit of 20%, except for one six-minute period in any one hour not to exceed 30%.

9 VAC 5-50-400-410 - Environmental Protection Agency Standards of Performance
For New Stationary Sources – contain references to applicable federal new source performance standards (NSPS) rules.

9 VAC 5-60-90 – 100 – National Emission Standards for Hazardous Air Pollutants – contain references to applicable federal maximum achievable control technology (MACT) rules.

The following federal regulations that have specific emission requirements have been determined to be applicable:

MACT ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. Virginia has delegated authority to enforce this rule at major sources only. The engine is subject to provisions of this rule.

NSPS JJJJ - Stationary Spark Ignition Internal Combustion Engines. Virginia does not have delegated authority to enforce this rule. The engine appears to be subject to this rule.

Engine #114 is a propane-fired 56 hp emergency generator installed in 2009, and is subject to the following provisions of MACT ZZZZ and NSPS JJJJ:

- §63.6590(c) requires that such units meet the requirements of 40 CFR 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines;
- §60.4231(c) appears to require such emergency generators to meet Phase 1 standards of §90.103 for Class II engines – these standards seem to be roughly equivalent to Table 1 standards for emergency units >25 hp and <130 hp;
- §60.4233(c) specifies that units of this size meet manufacturer's requirements of §63.4231(c);
- §60.4234 requires that standards be maintained over the life of the unit;

- §60.4237(c) requires a non-resettable hour meter if you cannot meet non-emergency standards;
- §60.4243(a) contains requirements for maintaining certified and non-certified engines;
- §60.4243(d) limits testing times for emergency engines; and
- §60.4245(a), (b) require recordkeeping.

Monitoring

The engine is subject to federal rules established under Sections 111 or 112 proposed after November 15, 1990. The monitoring requirements of these regulations are presumed to be sufficient to meet periodic monitoring.

Although the engine is subject to an opacity limitation under 9 VAC 5-50-80, because the unit is fired with propane, no opacity is expected under normal operation. Therefore, no visible emissions checks are recommended to demonstrate compliance.

Recordkeeping

The permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include documentation of malfunctions, notifications, performance tests, hours of operation, and documentation for meeting emission standards.

Testing

The permit does not require source tests. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

The company is required to provide notification for malfunctions of processing or control equipment that may cause excess emissions for more than one hour. An annual compliance certification is required of all Title V permit holders.

Streamlined Requirements

The unit is an affected source subject to MACT ZZZZ. However, 40 CFR 63.6590(c) states that MACT ZZZZ requirements do not apply, and that a qualifying unit may demonstrate compliance with MACT ZZZZ by meeting the requirements of NSPS JJJJ. Only NSPS JJJJ requirements are included in the permit.

EMISSION UNIT APPLICABLE REQUIREMENTS – #5 Heat Cleaning Oven

Limitations

The following limitations are State BACT requirements from Conditions 5, 10, 15, 23, 26, 30, and 32 of the minor NSR permit issued on April 30, 2008 (as amended 09/24/2012 & 03/12/13):

Condition 5 requires that particulate emissions be controlled by an afterburner or equivalent.

Condition 10 requires that the facility provide for testing ports as necessary.

Condition 15 requires that the oven process no more than 116.4 pounds per hour and 16.4 tons per year of metal parts.

Condition 23 limits particulate matter and PM10 emissions to 0.10 gr/dscf @12% CO_2.

Condition 26 requires that records be kept for metal parts throughput.

Condition 30 requires maintenance schedules, spare parts inventory, written operating procedures, and operator training records for control and process equipment affecting emissions.

Condition 32 requires that notification be provided for malfunctions of processing or control equipment that may cause excess emissions for more than one hour.

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5-50-80 and 290 New Source Standard for Visible Emissions
The unit is subject to an opacity limit of 20%, except for one six-minute period in any one hour not to exceed 30%.

9 VAC 5-50-10 – 50 contain general requirements for proper operation, maintenance, recordkeeping, notification, and compliance.

9 VAC 5-40-750 Standard for Particulate Matter
In the absence of specific requirements in Chapter 50, the requirements of this section apply to incinerators. The unit must not emit flue gas that contains more than 0.14 gr/dscf of particulate @ 12% CO_2.

Monitoring

The monitoring requirements in Condition 26 of the NSR permit have been modified to meet Part 70 requirements.

The minor NSR permit specifies that the unit should be equipped with an afterburner for particulate matter control. The oven is fired with natural gas and is used to combust small amounts of residual coating from metal parts. Natural gas combustion produces negligible particulate matter emissions. Combustion of coating material should not generate significant quantities of particulate matter. The particulate matter that is generated should be adequately

controlled by an afterburner operated at the manufacturer's recommended parameters. An oven with a properly operating afterburner should be capable of meeting the 0.10 gr/dscf requirement. The Title V permit requires that the company measure the afterburner temperature and verify that it is operating in the range recommended by the manufacturer (minimum temperature of 1400 °F). The company is required to record this temperature once per batch.

The Title V permit contains a requirement to perform weekly visible emission evaluations (VEEs) on the oven stack. If visible emissions are present, a six-minute visible emission evaluation (VEE) must be performed according to 40 CFR 60, Appendix A, Method 9. If during the six minute period, any violations of the 20% opacity standard are noted, a one-hour VEE is required to demonstrate compliance with the standard. The one-hour VEE is not required if the source of excess visible emissions is corrected and returned to no visible emissions in a timely manner. This will satisfy the periodic monitoring requirement for the visible emission limitation included in the permit.

The unit is equipped with an afterburner to control particulate matter (PM10) emissions. The company provided emissions estimates showing that potential pre-controlled emissions of PM10 are not of a major quantity. Based on the January 13, 1994 permit analysis, uncontrolled particulate matter emissions from the unit are 41.5 tons per year. Potential pre-control emissions are smaller than this figure. Since the figure is less than 100 tons per year, CAM requirements do not apply.

Recordkeeping

The Title V permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include monthly and annual throughput of metal parts, hours of operation, visible emission evaluation results, and afterburner temperature observations.

Testing

The Title V permit does not require source tests for this unit. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

The company is required to provide notification for malfunctions of processing or control equipment that may cause excess emissions for more than one hour. An annual compliance certification is required of all Title V permit holders.

Streamlined Requirements

The requirements of 9 VAC 5-40-750 are less stringent than the present minor NSR permit requirement. Therefore, the Title V permit will only reflect the particulate matter emission limit of

0.10 gr/dscf @ 12% CO_2. This limitation was established under 9 VAC 5-50-260 (BACT).

EMISSION UNIT APPLICABLE REQUIREMENTS - #40, #41, #81, Resin Impregnation and Prepreg Operations

The company identified Ref. #49 (silicone resin impregnation room) as being permanently removed from the facility. This reference was removed from the Title V permit.

Limitations

The following limitations are State BACT requirements from Conditions 10, 20, 26, 30, and 32 of the minor NSR permit issued on April 30, 2008 (as amended 09/24/2012 & 03/12/13):

Condition 10 requires that the facility provide for testing ports as necessary.

Condition 20 limits emissions from this operation to:

VOC	25.4 lb/hr	6.0 tons/yr

Condition 26 requires the company to maintain records of material consumption, material MSDS information, and hourly and annual emission rates of the above pollutant.

Condition 30 requires maintenance schedules, spare parts inventory, written operating procedures, and operator training records for control and process equipment affecting emissions.

Condition 32 requires that notification be provided for malfunctions of processing or control equipment that may cause excess emissions for more than one hour.

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5-50-10 – 50 contain general requirements for proper operation, maintenance, recordkeeping, notification, and compliance.

Monitoring

Since no particulate matter emissions result from this process, an opacity limit does not apply, and no visual emissions evaluations are necessary to show compliance. Compliance with VOC emission limits will be determined by calculations from consumption and VOC content of resin materials, as required by Condition 26 of the NSR permit. No further monitoring practices are required.

The process does not employ pollution control devices. Therefore, CAM requirements do not apply.

Recordkeeping

The Title V permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include material consumption, hours of operation, material MSDS information, and hourly, monthly, and annual emission rates.

Testing

The Title V permit does not require source tests. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

The company is required to provide notification for malfunctions of processing or control equipment that may cause excess emissions for more than one hour. An annual compliance certification is required of all Title V permit holders.

Streamlined Requirements

There are no streamlining proposals for this operation.

EMISSION UNIT APPLICABLE REQUIREMENTS - #1-4 Metal Cleaning

Limitations

The following limitations are State BACT requirements from Conditions 7, 10, 26, 30, and 32 of the minor NSR permit issued on April 30, 2008 (as amended 09/24/2012 & 03/12/13):

Condition 7 requires that acid fume emissions be controlled by a venturi scrubber.

Condition 10 requires that the facility provide for testing ports as necessary.

Condition 26 requires that records be kept to show compliance.

Condition 30 requires maintenance schedules, spare parts inventory, written operating procedures, and operator training records for control and process equipment affecting emissions.

Condition 32 requires that notification be provided for malfunctions of processing or control equipment that may cause excess emissions for more than one hour.

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5-50-10 – 50 contain general requirements for proper operation, maintenance, recordkeeping, notification, and compliance.

Monitoring

The monitoring and recordkeeping requirements in Condition 26 of the NSR permit have been modified to meet Part 70 requirements.

Visible emissions have not been previously observed from this process. Therefore, no opacity requirements apply.

In order to determine that the venturi scrubber is operating properly, the company will conduct visual observations via a monitoring port to insure that water is flowing through the device. These observations will be made once per shift.

The unit is equipped with a venturi scrubber to control potential aerosol/particulate matter (PM10) emissions. The company estimates that uncontrolled emissions from the metal cleaning operations are less than one ton per year. Emission estimates from the January 13, 1994 permit analysis have also predicted less than one ton per year of acid aerosol emissions from the operation. Because potential pre-controlled emissions of PM10 are not of a major quantity, CAM requirements do not apply to this process.

Recordkeeping

The Title V permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include hours of operation, material safety data sheets for each material used, monthly and annual material consumption, and results of visual scrubber observations.

Testing

The Title V permit does not require source tests. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

The company is required to provide notification for malfunctions of processing or control equipment that may cause excess emissions for more than one hour. An annual compliance certification is required of all Title V permit holders.

Streamlined Requirements

There are no streamlining proposals for this operation.

EMISSION UNIT APPLICABLE REQUIREMENTS - #20, 46, 57, 58, 66, 67, FWG1-11, 80, 95, 107, 110 – Grinding/Sanding/Routing

The company identified Refs. #CG1-9 (ceramic grinders) and Ref. #108 (grinding booth) as being permanently removed from the facility. These references were removed from the Title V permit.

Limitations

The following limitations are State BACT requirements from Conditions 6, 10, 22, 24, 26, 30, and 32 of the minor NSR permit issued on April 30, 2008 (as amended 09/24/2012 & 03/12/13):

Condition 6 requires that particulate emissions be controlled by dry filters or baghouses.

Condition 10 requires that the facility provide for testing ports as necessary.

Condition 22 limits emissions to:

PM/PM10	26.3 lb/hr	13.8 tons/yr

Condition 24 limits visible emissions to 5% opacity.

Condition 26 requires that records of material throughput to this operation be kept to show compliance.

Condition 30 requires maintenance schedules, spare parts inventory, written operating procedures, and operator training records for control and process equipment affecting emissions.

Condition 32 requires that notification be provided for malfunctions of processing or control equipment that may cause excess emissions for more than one hour.

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5-50-10 – 50 contain general requirements for proper operation, maintenance, recordkeeping, notification, and compliance.

9 VAC 5-50-80 and 290, New Source Standard for Visible Emissions.
(see Streamlining discussion)

Monitoring

The monitoring requirements in Condition 26 of the NSR permit have been modified to meet Part 70 requirements.

The Title V permit contains a requirement to perform weekly visible emission evaluations (VEEs) on the fabric filter stacks. If visible emissions are present, a six-minute visible emission evaluation (VEE) must be performed according to 40 CFR 60, Appendix A, Method 9. If during the six minute period, any violations of the 5% opacity standard are noted, a one-hour VEE is required to demonstrate compliance with the standard. The one-hour VEE is not required if the source of excess visible emissions is corrected and returned to no visible emissions in a timely manner. This will satisfy the periodic monitoring requirement for the visible emission limitation included in the permit.

Compliance with the particulate matter emissions limits may be demonstrated by properly maintaining the control systems for the emission units, and by conducting the above weekly visible emission evaluations.

CAM requirements apply to individual pollutant specific emission units. For this operation, there are multiple such units to which CAM could apply. Condition 22 of the current minor NSR permit establishes PM10 emission limits for multiple units that were permitted at different times. Based on the estimates underlying these emission limits, the entire operation produces less than 100 T/yr in potential pre-controlled emissions (using 80% control from fiberglass filters):

(13.8 tons/yr)/(1-0.8) = 69 T/yr pre-controlled emissions of PM10

Even if the control efficiency is higher, the potential pre-controlled emissions per unit are less than the threshold. Therefore, CAM requirements do not apply to grinding/sanding units/operations.

Recordkeeping

The Title V permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include hourly, monthly, and annual material balance for the routing, grinding, and sanding operations, and the results of the visible emission evaluations.

Testing

The Title V permit does not require source tests. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

The company is required to provide notification for malfunctions of processing or control equipment that may cause excess emissions for more than one hour. An annual compliance certification is required of all Title V permit holders.

Streamlined Requirements

9 VAC 5-50-80 and 9 VAC 5-50-290 contain opacity requirements of 20% for new sources. Since Condition 24 of the NSR permit requires 5% opacity, it is more stringent and streamlining is appropriate. The Title V permit will require 5% opacity limits for the grinding/sanding/routing equipment.

EMISSION UNIT APPLICABLE REQUIREMENTS - #27 – Flame/Metal Arc Spray Booth

Limitations

The following limitations are State BACT requirements from Conditions 6, 9, 10, 16, 17, 24, 26, 30, and 32 of the minor NSR permit issued on April 30, 2008 (as amended 09/24/2012 & 03/12/13):

Condition 6 requires that particulate emissions be controlled by dry filters or baghouses.

Condition 9 requires that the booth be equipped with differential pressure monitoring devices.

Condition 10 requires that the facility provide for testing ports as necessary.

Condition 16 limits metal throughput to the flame spray operation to 10 lb/hr and 4 tons/yr.

Condition 17 limits metal throughput to the arc spray operation to 4 lb/hr and 0.5 tons/yr.

Condition 24 limits visible emissions to 5% opacity.

Condition 26 requires that monthly and annual records of metal throughput to the flame and arc spray operations be kept.

Condition 30 requires maintenance schedules, spare parts inventory, written operating procedures, and operator training records for control and process equipment affecting emissions.

Condition 32 requires that notification be provided for malfunctions of processing or control equipment that may cause excess emissions for more than one hour.

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5-50-10 – 50 contain general requirements for proper operation, maintenance, recordkeeping, notification, and compliance.

9 VAC 5-50-80 and 290, New Source Standard for Visible Emissions.
(see Streamlining discussion)

Monitoring

The monitoring and recordkeeping requirements in Condition 26 of the NSR permit have been modified to meet Part 70 requirements.

The Title V permit contains a requirement to perform weekly visible emission evaluations (VEEs) on the booth stacks. If visible emissions are present, a six-minute visible emission evaluation (VEE) must be performed according to 40 CFR 60, Appendix A, Method 9. If during the six minute period, any violations of the 5% opacity standard are noted, a one-hour VEE is required to demonstrate compliance with the standard. The one-hour VEE is not required if the source of excess visible emissions is corrected and returned to no visible emissions in a timely manner. This will satisfy the periodic monitoring requirement for the visible emission limitation included in the permit.

The spray booth is equipped with a pressure drop measuring device to indicate that filtration devices are present and operating properly.

The previous Title V permit had established a particulate matter emissions limitation derived from 9 VAC 5-40-260 relating to Generalized Process Operations. DEQ and the company previously presumed that this particulate matter emission standard would apply in the absence of a specific particulate matter emission limitation derived from 9 VAC 5, Chapter 50, regulations for New and Modified Stationary Sources. However, this unit is subject to Chapter 50 state BACT requirements (9 VAC 5-50-260) for particulate matter established in a minor new source review permit that effectively limits particulate matter emissions through control device requirements and opacity limitations. Therefore, 9 VAC 5, Chapter 40 requirements will not apply and the previous emission limits based on the generalized process weight rate will be removed. Compliance will be based on the abovementioned opacity monitoring and control device utilization.

Since pre-controlled emissions cannot exceed the permitted material throughput limitations, they cannot exceed 4.5 tons per year of total metal while operating as either flame or arc spray system. Therefore, CAM requirements do not apply to the unit.

Recordkeeping

The Title V permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include hours of operation, annual metal throughput, and visible emission evaluation results.

Testing

The Title V permit does not require source tests. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

The company is required to provide notification for malfunctions of processing or control equipment that may cause excess emissions for more than one hour. An annual compliance certification is required of all Title V permit holders.

Streamlined Requirements

9 VAC 5-50-80 and 9 VAC 5-50-290 contain opacity requirements of 20% for new sources. Since Condition 24 of the NSR permit requires 5% opacity, it is more stringent and streamlining is appropriate. The Title V permit will require a 5% opacity limit for the booth.

EMISSION UNIT APPLICABLE REQUIREMENTS - #6, 7, 9, 10, 11, 13, 14, 21, 22, 23, and 80 – Shelter Coating; #63, 65, 69a&b – Composite Coating; #96-98 - Resin Transfer Molding;

The company identified Refs. #108 & 109 (armor plate manufacturing) as being permanently removed from the facility. These references were removed from the Title V permit.

Limitations

The following limitations are State BACT requirements from Conditions 3, 4, 8, 9, 10, 18, 19, 24, 26, 30, and 32 of the minor NSR permit issued on April 30, 2008 (as amended 09/24/2012 & 03/12/13):

> Condition 3 requires particulate matter emissions from tactifier booths be controlled by fiberglass filters or equivalent.
>
> Condition 4 requires that particulate matter emissions from shelter coating be controlled by paper filters or equivalent.

Condition 8 requires that VOC emissions be minimized during cleaning by work practices.

Condition 9 requires that booths be equipped with differential pressure monitoring devices.

Condition 10 requires that the facility provide for testing ports as necessary.

Condition 18 limits emissions from the resin transfer molding and shelter and composites coating operations to:

VOC	916.26 lb/hr	239.51 tons/yr

(This limit includes emissions from booths and several non-point sources including paint mixing operations, paint drying operations, surface preparation, resin molding/curing, and a solvent-degreasing unit.)

Condition 19 limits PM/PM10 emissions from shelter and composites coating operations and resin transfer molding operations to:

PM/PM10	4.17 lb/hr	3.11 tons/yr

Condition 24 limits visible emissions to 5% opacity.

Condition 26 requires records to be kept of material consumption, MSDS, hours of operation, hourly, and monthly and annual material balance of throughput and emissions for each pollutant.

Condition 30 requires maintenance schedules, spare parts inventory, written operating procedures, and operator training records for control and process equipment affecting emissions.

Condition 32 requires that notification be provided for malfunctions of processing or control equipment that may cause excess emissions for more than one hour.

The following Virginia Administrative Codes that have specific emission requirements have been determined to be applicable:

9 VAC 5-50-10 – 50 contain general requirements for proper operation, maintenance, recordkeeping, notification, and compliance.

9 VAC 5-50-80 and 290, New Source Standard for Visible Emissions
(see streamlining discussion)

9 VAC 5-60-90 – 100 – National Emission Standards for Hazardous Air Pollutants – contain references to applicable federal maximum achievable control technology (MACT) rules. Virginia has delegated authority to enforce the rules described below.

The following federal regulations that have specific emission requirements have been determined to be applicable:

40 CFR 63.1-15 – Subpart A, General Provisions contains general requirements applicable to MACT sources.

40 CFR 63.741-759, Subpart GG – National Emission Standards for Hazardous Air Pollutants for Aerospace Manufacturing and Rework Facilities applies to the composites coating operations (primer and topcoat) and resin transfer molding, but not to shelter coating operations. The requirements of this subpart include work practice standards for topcoats, primers, cleaners, and control devices. These requirements do not apply to tactifier booths #96 – 97 since the coatings reportedly do not contain HAP or VOC (40 CFR 63.741(f)).

40 CFR 63.3880-3981, Subpart MMMM – National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products applies to the shelter coating operations. According to the company, only coatings that fall under the general use category are applied.

Monitoring

The monitoring requirements in Condition 26 of the NSR permit have been modified to meet Part 70 requirements.

The Title V permit contains a requirement to perform weekly visible emission evaluations (VEEs) on the spray booth stacks. If visible emissions are present, a six-minute visible emission evaluation (VEE) must be performed according to 40 CFR 60, Appendix A, Method 9. If during the six minute period, any violations of the 5% opacity standard are noted, a one-hour VEE is required to demonstrate compliance with the standard. The one-hour VEE is not required if the source of excess visible emissions is corrected and returned to no visible emissions in a timely manner. This will satisfy the periodic monitoring requirement for the visible emission limitation included in the permit.

All spray booths are required to be equipped with devices to measure the differential pressure drop across the filters.

Emissions from aerospace composites coating operations, metal parts coating operations, and resin transfer molding are limited by total VOC and PM/PM10 emission limits in the NSR permit, and are tracked by material balance calculations using VOC and solids content of the materials. With respect to aerospace coating and resin molding transfer operations, MACT Subpart GG (40 CFR 63.750(e)(1)) allows the use of “manufacturer’s supplied data or Method 24” to

determine VOC content. In a previous Title V permit, the company was required to test each coating material to verify VOC content if VOC emissions exceed 75% of the emission limitation. However, this is not a requirement of either MACT GG or MACT MMMM (both of these rules relate to VOC and HAP), and has no other underlying basis. The monitoring requirements contained in these rules are considered adequate for Title V periodic monitoring. The requirement will therefore be removed.

MACT Subpart GG requires that aerospace coating booths be continuously monitored for pressure drop across the particulate matter control system. The pressure drop must be recorded once per shift. Also, monthly visual leak inspections are required for the enclosed spray gun cleaners.

Tactifier booths are controlled by single-stage fiberglass filters and are not subject to MACT Subpart GG.

MACT MMMM applies to the shelter coating operations, including storage and mixing containers. The regulation requires no specific monitoring practices for sources not utilizing add-on control devices. The company will have to keep records and perform calculations to demonstrate compliance with the emission standards. The regulation is presumed to contain monitoring sufficient to meet periodic monitoring requirements.

Since VOC emissions from the coating operations are not controlled, CAM requirements do not apply. PM10 emissions are controlled by filters providing up to 99% removal efficiency. CAM requirements would apply to individual units with pre-control emissions that are greater than 100 tons per year. Using the emission limits in Condition 19 as a basis, the worse case PM10 emission estimate is given by,

(3.11 T/yr)/(1-0.99) = 311 T/yr pre-controlled

Since this potential is spread over many units, pre-controlled emissions per unit remain less than 100 tons per year, and CAM requirements do not apply.

Recordkeeping

The Title V permit includes requirements for maintaining records of all monitoring and testing required by the permit. These records include annual material consumption; MSDS information on materials used; hourly, monthly, and annual material balance of VOC and PM/PM10 throughput and emissions; results of weekly visible emission evaluations; daily hours of operation; and shipped waste materials. The permit also includes the requirement to maintain records of weekly visible emissions evaluations. Emission calculations are based on material usage, VOC and solids contents, and appropriate particulate matter control and transfer.

MACT Subpart GG contains requirements to record information about primers and topcoats used in applying aerospace coatings, such as; name, VOC/HAP contents, monthly usage, certifications or test results showing VOC/HAP contents, and pressure drop across the control device once per shift. Records of leaks and repairs are required for spray gun cleaning.

Records of flush cleaning solvents include the name of the solvent, volumes used, and supporting calculations. Records of hand-wipe cleaning operations include names of cleaners, monthly or annual volumes used, vapor pressures, and test results or calculations used to show compliance with the applicable standards.

MACT MMMM requires the company to keep records of manufacturer's data for each category of coating material, volumes of coating materials consumed, various calculations related to HAP and solids contents in each coating material, testing results, notifications, deviations, and waste disposal information.

Testing

The Title V permit does not require source tests. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

MACT GG requires that specific testing procedures or manufacturers data be used to determine VOC and HAP content in aerospace primers and topcoats. Dry particulate filter certification will be made using EPA Method 319. Also, the composition of hand-wipe cleaning solutions must be determined by approved methods.

MACT MMMM provides for testing in order to determine coating material density (for sources complying without add-on controls) if supplier information is not available. No other specific testing is required unless add-on controls are used.

Reporting

The Aerospace Coating MACT (GG) requires reporting various data for topcoats, primers, and cleaners on a semiannual basis. They include identification of instances where HAP and VOC limits are exceeded, instances where control device exceedances occur, instances where pressure drop is outside limits, compliance certifications, leaks from enclosed spray gun cleaners not repaired within 15 days, and noncompliant spray gun cleaning methods are used. Annual reports of filter pressure drop limit exceedances are required for primer/topcoat booths.

MACT GG also requires that an annual report be submitted. In accordance with 40 CFR 63.10(a)(5), this date can correspond to due dates established for other reports that cover the same time period. The Title V permit requires, in Condition XIII.D, that an annual compliance certification be submitted by March 1 of each year. Therefore, in accordance with 40 CFR 63.10(a)(5), the due date for the annual report required in the MACT has been changed to March 1 of each year.

MACT MMMM (40 CFR 60.3920) requires submission of a semiannual report detailing compliance information including any deviations during the reporting period.

Semiannual reports are required by both MACT regulations. The company desires that all MACT reports coincide with the other reports required by the Title V permit. As discussed above, 40 CFR 63.10 (a)(5) gives states the authority to allow the reports to cover the same reporting periods (January 1 – June 30; July 1 – December 31) and submission dates (March 1 and September 1) as the general monitoring report required for Title V sources. The company made a written request, and DEQ responded with an approval that was forwarded to EPA.

The company is required to provide notification for malfunctions of processing or control equipment that may cause excess emissions for more than one hour. An annual compliance certification is required of all Title V permit holders.

Streamlined Requirements

9 VAC 5-50-80 and 9 VAC 5-50-290 contain opacity requirements of 20% for new sources. Since Condition 24 of the minor NSR permit requires 5% opacity, it is more stringent and streamlining is appropriate. The Title V permit will require 5% opacity limits for the booths.

Condition 4 of the minor NSR permit requires that spray booths be equipped with kraft paper filters or equivalent for particulate matter control. The minor NSR permit does not contain applicable MACT requirements. According to 40 CFR 63.745(g), the company is required to utilize applicable multi-stage arrestors controlling inorganic HAPs from subject aerospace coating spray booths. Such control devices will provide particulate matter control efficiencies superior to those of single-stage kraft paper filters. Therefore, the MACT GG requirements will streamline and replace the requirements of Condition 4 of the minor NSR permit.

A condition was removed from the Title V permit related to the submission of a notification of compliance status for MACT MMMM affected equipment (40 CFR 63.3910(c)). This is a fulfilled requirement.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Included in this section are requirements of Conditions 10 and 28-35 of the minor NSR permit issued on April 30, 2008 (as amended 09/24/2012 & 03/12/13). These conditions explain state requirements and authority to inspect the facility and suspend the permit should conditions warrant. They require the facility to be constructed in order to allow for emissions testing, should it be necessary. The conditions also identify the company's responsibility to provide

emissions data to the Department, to reduce activity to avoid violating ambient standards, and to keep a copy of the permit on-site.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.2-604 and §10.1-1185 of the *Code of Virginia,* and the "Department of Environmental Quality Agency Policy Statement No. 2-09".

This general condition cites the sections that follow:
9 VAC 5-80-80. Application
9 VAC 5-80-140. Permit Shield
9 VAC 5-80-150. Action on Permit Applications

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

J. Permit Modification

This general condition cites the sections that follow:
9 VAC 5-80-50. Applicability, Federal Operating Permit For Stationary Sources
9 VAC 5-80-190. Changes to Permits.
9 VAC 5-80-260. Enforcement.
9 VAC 5-80-1100. Applicability, Permits For New and Modified Stationary Sources
9 VAC 5-80-1605. Applicability, Permits For Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas
9 VAC 5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications Locating in Nonattainment Areas

U. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on General Condition F.

This general condition cites the sections that follow:
9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction
9 VAC 5-80-110. Permit Content

Y. Asbestos Requirements

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

This general condition contains a citation from the Code of Federal Regulations that follow:
40 CFR 61.145, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to demolition and renovation.
40 CFR 61.148, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to insulating materials.

40 CFR 61.150, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to waste disposal.

FUTURE APPLICABLE REQUIREMENTS

MACT Subpart DDDDD for commercial, industrial, and institutional boilers was vacated by federal court on July 30, 2007. The rule was re-issued on February 21, 2011, and was thereafter reconsidered. The final rule was issued on December 21, 2012. The compliance date is three years following publication in the Federal Register (compliance date in 2016). Should the facility become a minor source prior to this date, the rule would not apply.

No other specific future applicable requirements are known at this time.

INAPPLICABLE REQUIREMENTS

40 CFR 60 (NSPS), Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units – applies to boilers with input heat capacity greater than 10 MMBtu/hr and less than 100 MMBtu/hr constructed or modified after June 9, 1989. Both boilers at the facility were constructed prior to this date.

40 CFR 60 (NSPS), Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984 – applies to storage tanks much larger than those at this facility. It is therefore inapplicable.

40 CFR 60 (NSPS), Subpart VVV – Standards of Performance for Polymeric Coating of Supporting Substrates Facilities – applies to facilities constructed after April 30, 1987 that are

engaged in applying coatings to fabrics, paper, or other flexible materials. General Dynamics-Armament and Technical Products, Inc. has operated similar processes for the impregnation of resins on various fabrics to be used in the manufacture of composite materials (reference #40, 41, & 81). However, the company installed these operations in the early 1970's, many years before the applicable date of Subpart VVV without subsequent modification. Therefore, the regulation does not apply.

40 CFR 60 (NSPS), Subpart FFFF – Emission Guidelines and Compliance Times for Other Solid Waste Incineration Units That Commenced Construction On or Before December 9, 2004 – applies to very small municipal waste incinerators and institutional waste incinerators. Since it does not apply to small industrial units, it does not affect the heat cleaning oven.

40 CFR 63, Subpart T – National Emission Standards for Halogenated Solvent Cleaning – applies to batch vapor degreasing units which use one of several chlorinated solvents after December 2, 1997. The company operates a batch vapor degreasing unit in the shelter fabrication and coating operation (accounted for under reference #80), and filed an initial notification report with EPA Region III on August 22, 1995 identifying compliance options. The company switched solvents prior to the compliance date and notified EPA. The solvent that the company uses contains no chlorine, and the MACT therefore does not apply. Should the company change solvents in the future, this regulation may apply.

40 CFR 63, Subpart JJJJ - National Emission Standards for Paper and Other Web Coating – applies to coating paper, film, or other flexible webs. 40 CFR 63.3300 references flexible packaging and pressure sensitive tape and abrasive materials. Operations at the facility do not resemble those described. Composite materials are not flexible and fabrics become a structural component of the solid products.

40 CFR 63, Subpart MMMM - National Emission Standards for Miscellaneous Metal Parts and Products Coating – applies to metal finishing operations. 40 CFR 63.3881(c)(10)&(11) provide exclusions for aerospace coating of vehicles and components. Therefore, it does not apply to the composite coating operations. This subpart does, however, apply to other coating operations at the facility.

40 CFR 63, Subpart OOOO - National Emission Standards for Printing, Coating, and Dyeing of Fabric and Other Textiles – applies to coating or finishing fabrics. The company uses fabrics in their composite production operations. However, these activities reportedly do not involve HAP-containing materials. 40 CFR 63.4281(c) excludes those activities that do not involve the use of HAP-containing materials. The company currently qualifies for this exclusion.

40 CFR 63, Subpart PPPP – National Emission Standards for Surface Coating of Plastic Parts and Products – applies to coating of parts/products formed from resins. 40 CFR 63.4481(c)(11) excludes surface coating of plastic aerospace components that comply with 40 CFR 63, Subpart GG (aerospace manufacture and rework facilities).

40 CFR 63, Subpart WWWW - National Emission Standards for Reinforced Plastics Composites Production – applies to production of reinforced plastic composites using styrene-based

materials. 40 CFR 63.5785(d) excludes operations that use less than 1.2 tons per year of resins or gel coats containing styrene. The company currently qualifies for this exclusion.

9 VAC 5 Chapter 40, Article 24 – Emission Standards for Solvent Metal Cleaning Operations Using Non-halogenated Solvents – applies to solvent metal cleaning operations located in VOC control areas of the state. This facility is not located in such an area.

9 VAC 5 Chapter 40, Article 25 - Emission Standards for Volatile Organic Compound Storage and Transfer Operations – applies to VOC storage and transfer operations located in VOC control areas of the state. This facility is not located in such an area.

9 VAC 5 Chapter 40, Article 34 - Emission Standards for Miscellaneous Metal Parts and Products Coating Application Systems – applies to metal coating operations located in VOC control areas of the state. This facility is not located in such an area.

9 VAC 5 Chapter 40, Article 45 - Emission Standards for Commercial/Industrial Solid Waste Incinerators - does not apply to the heat cleaning oven. The regulation specifically excludes rack, part, and drum reclamation units from applicability in 9 VAC 5-40-6250 C.11. This state regulation contains the requirements of NSPS Subpart DDDD pertaining to these units.

9 VAC 5 Chapter 60, Article 5 – Emission Standards for Toxic Pollutants from New and Modified Sources – a state-only enforceable rule that applies to sources not specifically excluded. One such exclusion is sources included in MACT categories. Since this source is included in the aerospace manufacturing category, among others, and is subject to MACT standards for HAPs, this regulation does not apply.

Greenhouse Gases (GHG)

After July 1, 2011, sources that emit over 100,000 tons per year carbon dioxide equivalents (CO_2e) and have a GHG mass equivalent to 100 tons per year are required to have a Title V permit even if they are not Title V major for any criteria pollutant or HAP. Additionally, any source that increases CO_2e emissions more than 75,000 tons per year as a result of a modification is required to address CO_2e emissions as part of the Title V permit.

The company calculated that potential CO_2e emissions from the facility are approximately 45,000 tons per year. Therefore, there are no applicable greenhouse-gas permitting requirements.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
8, 10, 15, 16, 17, 24, 25, 26, 28, 29, 30, 34, 35, 36, 37, 38, 39, 42, 43, 44, 45, 47, 71, 72, 73, 74, 75, 106, 115	Gas-fired Drying ovens and heaters	9 VAC 5-80-720 C 2.a.		< 10 MMBtu/hr
94, 99-105	Electric ovens and heaters	9 VAC 5-80-720 A.6 & 39		
59, 60, 62, 64, 86	Steam ovens and dryers	9 VAC 5-80-720 A.39		
82, 83, 85	Vacuum Pumps	9 VAC 5-80-720 B	VOC	
48	Ignition Loss Burnout oven	9 VAC 5-80-720 A.28		
70	Lab spray booth	9 VAC 5-80-720 A.28		
77, 88	Diesel Storage Tanks	9 VAC 5-80-720 A.41		
107	Various grinding, buffing, trimming	9 VAC 5-80-720 B	PM	
Shop Vacs	Shop Vacuum Cleaners	9 VAC 5-80-720 A.50		

[1]The citation criteria for insignificant activities are as follows:
9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application
9 VAC 5-80-720 B - Insignificant due to emission levels
9 VAC 5-80-720 C - Insignificant due to size or production rate

The company identified Ref. #31 (steam curing oven), Refs. #50-56 (electric drying ovens), Ref. # 68 (curing oven), and Ref. #89 (diesel storage tank associated with the removed fire pump engine) as being permanently removed from the facility. These units were removed from the insignificant emissions unit table.

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

The proposed permit was advertised by public notice in the *Smyth County News & Messenger* from May 5, 2013 to June 3, 2013. No public comments were received. Agencies from nearby states (TN, NC, WV, and KY) were notified of the opportunity for public comment. No comments were received from affected states.

EPA review occurred concurrently with public review, and extended from May 5, 2013 to June 18, 2013. No comments were received from EPA.